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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/763,673	02/26/2001	Michael Fischer	49409	8610

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Keil & Weinkauff
1101 Connecticut Avenue NW
Washington, DC 20036

EXAMINER

THEXTON, MATTHEW

ART UNIT	PAPER NUMBER
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1714

DATE MAILED: 08/13/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/763,673

Applicant(s)

FISCHER ET AL.

Examiner

Matthew A. Thexton

Art Unit

1714

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any entered patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 6-13 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 6-13 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Claim Objections

Claim 8 is objected to because of the following informalities: in line 4 of this claim, the entry "b1.)" should be "b1.1)". Appropriate correction is required.

Claim 12 is objected to because of the following informalities: It appears by comparison to the disclosure that the impact strength limitation should read "...heat aging at 130 C > 25 kJ/m²..." (i.e., the "25" is missing). It appears that the elongation break limitation has an extraneous term of "30" (i.e., it should read "...elongation break after 1000h of continuous...)" Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 9 recites the limitation "components B12 and/or C1" in line one thereof. There is insufficient antecedent basis for this limitation in the claim. It appears this claim should depend from claim 8.

Claim 10 recites the limitation "component B1 is composed of components B11 and B12" in lines one and two thereof. There is insufficient antecedent basis for this limitation in the claim. It appears this claim should depend from claim 8.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 6, 8-10, 12, and 13 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Seiler et al. (US 4939201).

The reference discloses formulations which fully meet the indicated claims. The examples 1-10 are anticipatory. Since these examples fall within the formulation limitations of the indicated claims, the properties attributed to the claimed formulations in claim 12 must be inherent to the reference formulations.

2. Claims 6, 8-10, 12, and 13 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Lausberg et al. (US 4940746).

The reference discloses formulations which fully meet the indicated claims. The examples 1-10 are anticipatory. Since these examples fall within the formulation limitations of the indicated claims, the properties attributed to the claimed formulations in claim 12 must be inherent to the reference formulations.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Seiler et al. (US 4939201).

Although the copolymer formulation of claim 7 is not exemplified by the reference, it is suggested by the disclosure and the claims, for example see column 2, lines 49-52. Thus it would have been obvious to one of ordinary skill in the art at the time of the invention to follow the suggestions of the reference and prepare formulations using mixtures of polybutylene terephthalate and polyethylene terephthalate, in which even 1 percent polyethylene terephthalate would be encompassed by the claim. It is well established by the courts that where the general conditions of the claims are disclosed in the prior art, it is not patentable to discover optimum or workable ranges (e.g., concentrations, temperature, pH, etc.) by routine experimentation, absent evidence of unexpected results (In re Aller, et al., 105 USPQ 223 (CCPA 1955); In re Boesch, 205 USPQ (CCPA 1980)).

4. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lausberg et al. (US 4940746).

Although the copolymer formulation of claim 7 is not exemplified by the reference, it is suggested by the disclosure and the claims, for example see column 2, lines 44-47. Thus it would have been obvious to one of ordinary skill in the art at the time of the invention to follow the suggestions of the reference and prepare formulations using mixtures of polybutylene terephthalate and polyethylene terephthalate, in which even 1 percent polyethylene terephthalate would be encompassed by the claim. It is well established by the courts that where the general conditions of the claims are disclosed in the prior art, it is not patentable to discover optimum or workable ranges (e.g., concentrations, temperature, pH, etc.) by routine experimentation, absent

evidence of unexpected results (In re Aller, et al., 105 USPQ 223 (CCPA 1955); In re Boesch, 205 USPQ (CCPA 1980)).

5. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Seiler et al. (US 4939201) as applied to claim 6 above, and further in view of Binsack et al. (US 4535124).

Both references are directed to formulating thermoplastics composed of polyester, plus particulate shell-core rubber material, plus vinylaromatic/acrylonitrile copolymer, plus glass fibers.

The Binsack reference discloses thermoplastic molding formulations comprising a bimodal distributions of rubber particle diameter, substantially as required in claim 11 with respect to component B. It would have been obvious to one of ordinary skill in the art at the time of the invention to prepare formulations as disclosed in Seiler and substituting the type of rubber particles disclosed by Binsack in order to obtain the benefits attributed to them by Binsack, column 2, lines 24-55.

6. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lausberg et al. (US 4940746) as applied to claim 6 above, and further in view of Binsack et al. (US 4535124).

Both references are directed to formulating thermoplastics composed of polyester, plus particulate shell-core rubber material, plus vinylaromatic/acrylonitrile copolymer, plus glass fibers.

The Binsack reference discloses thermoplastic molding formulations comprising a bimodal distributions of rubber particle diameter, substantially as required in claim 11

with respect to component B. It would have been obvious to one of ordinary skill in the art at the time of the invention to prepare formulations as disclosed in Lausberg and substituting the type of rubber particles disclosed by Binsack in order to obtain the benefits attributed to them by Binsack, column 2, lines 24-55.

7. Claims 6-10, 12, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over McKee et al. (US 5219915).

The reference discloses formulations which fully meet the indicated claims. The only difference between the reference's single example and the indicated claims is the use for component a3 of a styrene/acrylonitrile copolymer in a weight ratio of 65:35, which is outside of the ratio specified in claim 6 for component C, which recites 50-90 weight percent vinylaromatic monomer and 10-25 percent of acrylonitrile and/or methacrylonitrile. However, the reference disclosure and claims define the component a3 as having 50-90 percent of styrene or substituted styrenes of formula I and 10-49 percent of acrylonitrile or methacrylonitrile or a mixture thereof, thus suggesting formulations that are within the scope of all the indicated claims. It would have been obvious to one of ordinary skill in the art at the time of the invention to follow the disclosure of the reference and thereby prepare formulations which are encompassed by the indicated claims. The glass transition temperature limitation for component B1 is met at column 3, lines 6-8 of the reference (component a21). It is well established by the courts that where the general conditions of the claims are disclosed in the prior art, it is not patentable to discover optimum or workable ranges (e.g., concentrations, temperature, pH, etc.) by routine experimentation, absent evidence of unexpected

results (In re Aller, et al., 105 USPQ 223 (CCPA 1955); In re Boesch, 205 USPQ (CCPA 1980)).

The properties required in claim 12 would be inherent to formulations arrived at by following the suggestions of the reference disclosure. While it would not be necessarily expected that all suggested formulations would have all the properties of the claim, it would have been obvious to one of ordinary skill in the art at the time of the invention to discover optimum or workable ranges (e.g., concentrations, temperature, pH, etc.) by routine experimentation, absent evidence of unexpected results (In re Aller, et al., 105 USPQ 223 (CCPA 1955); In re Boesch, 205 USPQ (CCPA 1980)).

8. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over McKee et al. (US 5219915) as applied to claim 6 above, and further in view of Binsack et al. (US 4535124).

Both references are directed to formulating thermoplastics composed of polyester, plus particulate shell-core rubber material, plus vinylaromatic/acrylonitrile copolymer, plus glass fibers.

The Binsack reference discloses thermoplastic molding formulations comprising a bimodal distributions of rubber particle diameter, substantially as required in claim 11 with respect to component B. It would have been obvious to one of ordinary skill in the art at the time of the invention to prepare formulations as disclosed in McKee and substituting the type of rubber particles disclosed by Binsack in order to obtain the benefits attributed to them by Binsack, column 2, lines 24-55.

9. Claims 6-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Binsack et al. (US 4535124).

The reference discloses formulations which are encompassed by the claims. Examples 24-26 employ polybutylene terephthalate, plus bimodal mixture of rubber based grafted shell-core particles using styrene/acrylonitrile copolymer shell and n-butylacrylate/triallylcyanurate core, plus styrene/acrylonitrile copolymer (column 14, lines 52-55). The glass transition temperature limitation of claim 6 would be inherent to the core rubber since it is formulated in the same way in the reference as in applicant's disclosure and formulation limitations claimed. The reference discloses use of glass fibers and in examples 27-29 uses 25 and 30 percent by weight of them. It would have been obvious to one of ordinary skill in the art at the time of the invention to follow the suggestions of the reference to employ glass fibers in examples 24-26 and thereby arrive at claims 6, and 8-13. It is well established by the courts that where the general conditions of the claims are disclosed in the prior art, it is not patentable to discover optimum or workable ranges (e.g., concentrations, temperature, pH, etc.) by routine experimentation, absent evidence of unexpected results (In re Aller, et al., 105 USPQ 223 (CCPA 1955); In re Boesch, 205 USPQ (CCPA 1980)).

Claim 7 requires a mixture of polybutylene terephthalate and polyethylene terephthalate, which is not exemplified, however, such a mixture is suggested (see column 7, line 47, to column 8, line 59, especially column 8, lines 54-59). It would have been obvious to one of ordinary skill in the art at the time of the invention to follow the suggestions of the reference to employ the mixture of polymers and thus arrive at the

limitations of claim 7. It is well established by the courts that where the general conditions of the claims are disclosed in the prior art, it is not patentable to discover optimum or workable ranges (e.g., concentrations, temperature, pH, etc.) by routine experimentation, absent evidence of unexpected results (In re Aller, et al., 105 USPQ 223 (CCPA 1955); In re Boesch, 205 USPQ (CCPA 1980)).

The properties required in claim 12 would be inherent to formulations arrived at by following the suggestions of the reference disclosure. While it would not be necessarily expected that all suggested formulations would have all the properties of the claim, it would have been obvious to one of ordinary skill in the art at the time of the invention to discover optimum or workable ranges (e.g., concentrations, temperature, pH, etc.) by routine experimentation, absent evidence of unexpected results (In re Aller, et al., 105 USPQ 223 (CCPA 1955); In re Boesch, 205 USPQ (CCPA 1980)).

10. Claims 6-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Seiler et al. (DE 3733838, translation).

The reference discloses formulations which are encompassed by the claims. Examples 1-10 employ polybutylene terephthalate, plus bimodal mixture of rubber based grafted shell-core particles using styrene/acrylonitrile copolymer shell and n-butylacrylate/triallylcyanurate core, plus styrene/acrylonitrile copolymer (65:35). The glass transition temperature limitation of claim 6 is stated to be < -20 C (page 7, lines 8-10 of translation), within the limitation of the claim, as expected since it is formulated in the same way in the reference as in applicant's disclosure and in the formulation limitations claimed. The reference discloses use of glass fibers and in examples 1-10

uses 30 percent by weight of them. The copolymer indicated as a3 is not within the limitations of claim 6 for component C, however the reference discloses and claims a3 of 50-90 percent styrene or substituted styrene and 10-50 percent of acrylonitrile or methacrylonitrile or mixtures, which encompasses by applicant's limitation for component C. It would have been obvious to one of ordinary skill in the art at the time of the invention to follow the suggestions of the reference to employ copolymers of styrene/acrylonitrile at proportions suggested and thereby arrive at the claimed limitation for component C. It is well established by the courts that where the general conditions of the claims are disclosed in the prior art, it is not patentable to discover optimum or workable ranges (e.g., concentrations, temperature, pH, etc.) by routine experimentation, absent evidence of unexpected results (In re Aller, et al., 105 USPQ 223 (CCPA 1955); In re Boesch, 205 USPQ (CCPA 1980)).

Claim 7 requires a mixture of polybutylene terephthalate and polyethylene terephthalate, which is not exemplified, however, such a mixture is suggested (see page 6, lines 3-6, translation). It would have been obvious to one of ordinary skill in the art at the time of the invention to follow the suggestions of the reference to employ the mixture of polymers and thus arrive at the limitations of claim 7. It is well established by the courts that where the general conditions of the claims are disclosed in the prior art, it is not patentable to discover optimum or workable ranges (e.g., concentrations, temperature, pH, etc.) by routine experimentation, absent evidence of unexpected results (In re Aller, et al., 105 USPQ 223 (CCPA 1955); In re Boesch, 205 USPQ (CCPA 1980)).

The properties required in claim 12 would be inherent to formulations arrived at by following the suggestions of the reference disclosure. While it would not be necessarily expected that all suggested formulations would have all the properties of the claim, it would have been obvious to one of ordinary skill in the art at the time of the invention to discover optimum or workable ranges (e.g., concentrations, temperature, pH, etc.) by routine experimentation, absent evidence of unexpected results (In re Aller, 105 USPQ 223 (CCPA 1955); In re Boesch, 205 USPQ (CCPA 1980)).

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

11. Claims 6-13 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 8-17 (as filed with preliminary amendment) of copending Application No. 09/889402. Although the conflicting claims are not identical, they are not patentably distinct from each other because the four required components of the claimed formulations are required as well

in the conflicting claims, and there is no evidence that the formulations are patentably distinct from the methods of molding same.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

12. Claims 6-12 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-9 of U.S. Patent No. 6174958. Although the conflicting claims are not identical, they are not patentably distinct from each other because the patented claims are more limited by requiring more components, but the present claims are "comprising" and hence do not exclude other components and thus the present claims are a subset of the patented claims and are obvious.

13. Claims 6-12 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-6 of U.S. Patent No. 6479617. Although the conflicting claims are not identical, they are not patentably distinct from each other because the patented claims are more limited by requiring more components, but the present claims are "comprising" and hence do not exclude other components and thus the present claims are a subset of the patented claims and are obvious.

Citation of pertinent prior art

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Bright et al. (EP 643104) discloses thermoplastic molding formulations using bimodal rubber particle diameter modifiers.

Translation of Weber et al. (DE 19750627) is cited to complete the record.

Translation of Blinne et al. is cited to complete the record.

Translation of JP7-173363 is cited to complete the record.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew A. Thexton whose telephone number is 703-305-5085. The examiner can normally be reached on Monday-Friday, 8:30 to 6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasudevan S Jagannathan can be reached on 703-306-2777. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.



Matthew A. Thexton
Primary Examiner
Art Unit 1714

August 4, 2003